



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2012-0497; Directorate Identifier 2011-NM-140-AD; Amendment 39-17415; AD 2013-07-11]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are superseding an existing airworthiness directive (AD) for certain The Boeing Company Model 777-200, -200LR, -300, and -300ER series airplanes. That AD currently requires inspecting for scribe lines in the skin along lap joints, butt joints, certain external doublers, and the large cargo door hinges, and doing related investigative and corrective actions if necessary. This new AD adds an inspection for scribe lines where external decals have been applied or removed across lap joints, large cargo door hinges, and external doublers, and related investigative and corrective actions if necessary. This AD was prompted by a determination that scribe lines could occur where external decals are installed or removed across lap joints, large cargo door hinges, or external doublers. We are issuing this AD to detect and correct scribe lines, which can develop into fatigue cracks in the skin. Undetected fatigue cracks can grow and cause sudden decompression of the airplane.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in the AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain other publication listed in this AD as of January 4, 2010 (74 FR 62217, November 27, 2009).

ADDRESSES: For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; phone: 206-544-5000, extension 1; fax: 206-766-5680; Internet: <https://www.myboeingfleet.com>. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is Document Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Melanie Violette, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office (ACO), 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6422; fax: 425-917-6590; email: MelanieViolette@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2009-24-08, Amendment 39-16096 (74 FR 62217, November 27, 2009). That AD applies to the specified products. The NPRM published in the Federal Register on May 31, 2012 (77 FR 32057). That NPRM proposed to continue to require inspecting for scribe lines in the skin along lap joints, butt joints, certain external doublers, and the large cargo door hinges, and doing related investigative and corrective actions if necessary. Additionally, that NPRM proposed to add an inspection for scribe lines where external decals have been applied or removed across lap joints, large cargo door hinges, and external doublers, and related investigative and corrective actions if necessary.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the proposal (77 FR 32057, May 31, 2012) and the FAA's response to each comment.

Requests to Change Compliance Time

American Airlines (AAL), British Airways, Boeing, and Emirates Airlines requested that we change paragraph (l) of the NPRM (77 FR 32057, May 31, 2012) to specify accomplishing the decal inspection at the compliance time described in Boeing Service Bulletin 777-53A0054, Revision 1, dated November 4, 2010, rather than the proposed "within 24 months after the effective date of this AD." The commenters stated that the initial compliance time in Boeing Service Bulletin 777-53A0054, Revision 1, dated November 4, 2010, for the scribe line inspection is significantly later.

We agree to change the compliance time for the reason the commenters stated. We have changed the compliance time in paragraph (l) of this AD to specify that the decal inspection must be done within 24 months after the effective date of this AD, or at

the applicable time specified in Boeing Service Bulletin 777-53A0054, Revision 1, dated November 4, 2010, for the scribe line inspection, whichever is later. We have also added a provision to paragraph (l) of this AD indicating that a review of airplane maintenance records is acceptable in lieu of the decal inspection if a record of all decal activities (installation or removal locations) can be conclusively determined from that review.

Request to Add Certain Exceptions

AAL requested that we revise the NPRM (77 FR 32057, May 31, 2012) to state that the inspections described in Boeing Service Bulletin 777-53A0054, Revision 1, dated November 4, 2010, are necessary only in “those areas that have been previously repaired and then the repair has been stripped and repainted.” AAL asserted that the inspection exceptions described in NOTES 1. through 5. in paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 777-53A0054, dated August 7, 2008, apply to paragraph (g) of the NPRM, and that these notes state “For each repair, if the operator can show that the airplane has never been stripped or repainted since the repair has been installed, then the repair inspections for that specific repair are not required.”

We partially agree with the commenter’s request. Note 1 to paragraph (g) of the NPRM (77 FR 32057, May 31, 2012) already allows such an exception, which is stated in NOTE 5 of paragraph 1.E., “Compliance,” of Boeing Alert Service Bulletin 777-53A0054, dated August 7, 2008. We have changed paragraph (g) in the NPRM to paragraph (g)(1) in this AD and have also changed Note 1 to paragraph (g) of the NPRM to paragraph (g)(2) in this AD. Since we have revised paragraph (g)(1) of this AD to reference Revision 1 of Boeing Service Bulletin 777-53A0054, dated November 4, 2010, as an appropriate source of service information, we have revised paragraph (g)(2) of this AD to state that the inspection exceptions described in NOTES 1. through 6. in paragraph 1.E., “Compliance,” of Boeing Service Bulletin 777-53A0054, Revision 1, dated November 4, 2010, apply to paragraph (g)(1) of this AD.

Request to Exclude Service Bulletin Step

AAL requested that we exclude the service information step of putting the airplane back in a serviceable condition, because that step does not affect the unsafe condition that the NPRM (77 FR 32057, May 31, 2012) seeks to address. Additionally, AAL explained that most operators will accomplish these inspections as part of a heavy maintenance visit, and returning the airplane to a serviceable condition will not be possible in the context of that statement, but will rather occur at a point in time well after these inspections are complete.

We agree with the request to state that the phrase “Put the airplane back to serviceable condition,” which is referenced in the service information specified in this final rule, is not mandated by this final rule. Other regulations require restoring the airplane to serviceable condition before further flight. Therefore, we have added exception phrasing in paragraphs (g)(1), (l), and (m) of this AD; and added new paragraph (n)(3) in this final rule.

Request to Use Alternative Measurement Tools

AAL requested that we revise the NPRM (77 FR 32057, May 31, 2012) to include the use of alternative equivalent measurement tools, rather than the specialized tools described in Boeing Service Bulletin 777-53A0054, Revision 1, dated November 4, 2010.

We disagree with the commenter’s request. To achieve an acceptable level of safety for the inspections required by this AD, several specialized tools were employed. The commenter did not provide any alternative tool(s) for our consideration or any standard on how it might be determined that a tool might be equivalent to a tool specified in Boeing Service Bulletin 777-53A0054, Revision 1, dated November 4, 2010. Under the provisions of paragraph (q) of this AD, however, we will consider requests for approval of an alternative method of compliance (AMOC) if sufficient data are submitted to substantiate that the proposed alternative measurement tool is equivalent to a

measurement tool specified in Boeing Service Bulletin 777-53A0054, Revision 1, dated November 4, 2010. We have not changed this AD in this regard.

Request to Change Compliance Time Wording

AAL requested that we change the compliance time wording in Boeing Service Bulletin 777-53A0054, Revision 1, dated November 4, 2010, from “after the original issue date ‘on’ this service bulletin,” to “after the original issue date ‘of’ this service bulletin.”

We disagree with the request to require Boeing to change the wording in Boeing Service Bulletin 777-53A0054, Revision 1, dated November 4, 2010. We do not consider delaying this AD action to address the identified unsafe condition necessary for this minor wording change. We have not changed this AD in this regard.

Conclusion

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting the AD with the changes described previously – and minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (77 FR 32057, May 31, 2012) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (77 FR 32057, May 31, 2012).

We also determined that these changes will not increase the economic burden on any operator or increase the scope of the AD.

Costs of Compliance

We estimate that this AD affects 163 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Exploratory inspection [retained action from AD 2009-24-08, Amendment 39-16096 (74 FR 62217, November 27, 2009)]	Up to 1,234 work-hours X \$85 per hour = \$104,890	\$0	Up to \$104,890	Up to \$17,097,070
Inspection for decals [new action]	Up to 4 work-hours X \$85 per hour = \$340	\$0	Up to \$340	Up to \$55,420

We have received no definitive data that would enable us to provide cost estimates for the on-condition actions specified in this AD.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, Section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency’s authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, “General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We have determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

- 2. The FAA amends § 39.13 by removing airworthiness directive (AD) 2009-24-08, Amendment 39-16096 (74 FR 62217, November 27, 2009), and adding the following new AD:

2013-07-11 The Boeing Company: Amendment 39-17415; Docket No. FAA-2012-0497; Directorate Identifier 2011-NM-140-AD.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD supersedes AD 2009-24-08, Amendment 39-16096 (74 FR 62217, November 27, 2009).

(c) Applicability

This AD applies to The Boeing Company Model 777-200, -200LR, -300, and -300ER series airplanes; certificated in any category; as identified in Boeing Service Bulletin 777-53A0054, Revision 1, dated November 4, 2010.

(d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 53, Fuselage.

(e) Unsafe Condition

This AD was prompted by a determination that scribe lines could occur where external decals are installed or removed across lap joints, large cargo door hinges, or external doublers. We are issuing this AD to detect and correct scribe lines which can develop into fatigue cracks in the skin. Undetected fatigue cracks can grow and cause sudden decompression of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Retained Inspection

This paragraph restates the requirements of paragraph (g) of AD 2009-24-08, Amendment 39-16096 (74 FR 62217, November 27, 2009), with new service information and a new exception.

(1) At the applicable times specified in paragraph 1.E., “Compliance,” of Boeing Alert Service Bulletin 777-53A0054, dated August 7, 2008, except as provided in paragraphs (h) and (j) of this AD: Do detailed exploratory inspections for scribe lines in the skin along lap joints, butt joints, certain external doublers, and the large cargo door hinges, except as specified in paragraph (n)(3) of this AD. Do all applicable related investigative and corrective actions at the times specified in Boeing Alert Service Bulletin 777-53A0054, dated August 7, 2008, by accomplishing all actions specified in the Accomplishment Instructions of Boeing Alert Service Bulletin 777-53A0054, dated August 7, 2008; or Boeing Service Bulletin 777-53A0054, Revision 1, dated November 4, 2010; except as specified in paragraphs (i) and (n)(3) of this AD. As of the effective date of this AD, use only Boeing Service Bulletin 777-53A0054, Revision 1, dated November 4, 2010, to do the actions required by this paragraph.

(2) The inspection exceptions described in NOTES 1.– 5. in paragraph 1.E., “Compliance,” of Boeing Alert Service Bulletin 777-53A0054, dated August 7, 2008; and NOTES 1. through 6. in paragraph 1.E., “Compliance,” of Boeing Service Bulletin 777-53A0054, Revision 1, dated November 4, 2010; apply to paragraph (g)(1) of this AD.

(h) Retained Exception to Service Bulletin Compliance Time

This paragraph restates the requirements of paragraph (h) of AD 2009-24-08, Amendment 39-16096 (74 FR 62217, November 27, 2009). Where Boeing Alert Service Bulletin 777-53A0054, dated August 7, 2008, specifies a compliance time after the date on that service bulletin, paragraph (g) of this AD requires compliance within the specified compliance time after January 4, 2010 (the effective date of AD 2009-24-08).

(i) Retained Exception to Service Bulletin Contact Information

This paragraph restates the requirements of paragraph (i) of AD 2009-24-08, Amendment 39-16096 (74 FR 62217, November 27, 2009), with new service

information. Where Boeing Alert Service Bulletin 777-53A0054, dated August 7, 2008; and Boeing Service Bulletin 777-53A0054, Revision 1, dated November 4, 2010; specify to contact Boeing for appropriate action, accomplish applicable actions using a method approved in accordance with the procedures specified in paragraph (q) of this AD.

(j) Retained Exception to Service Bulletin Inspection Instructions

This paragraph restates the requirements of paragraph (j) of AD 2009-24-08, Amendment 39-16096 (74 FR 62217, November 27, 2009). Where paragraph 1.E., “Compliance,” of Boeing Alert Service Bulletin 777-53A0054, dated August 7, 2008, specifies to “contact Boeing for inspection requirements for operation beyond 60,000 total flight-cycles after first repaint,” for those airplanes, this AD requires contacting the Manager, Seattle Aircraft Certification Office (ACO), for all inspection requirements of this AD and for doing the requirements.

(k) Retained Reporting

This paragraph restates the requirements of paragraph (k) of AD 2009-24-08, Amendment 39-16096 (74 FR 62217, November 27, 2009). At the applicable time specified in paragraph (k)(1) or (k)(2) of this AD: Submit a report of positive findings of cracks found during the inspection required by paragraphs (g) and (m) of this AD to the Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Alternatively, operators may submit reports to their Boeing field service representatives. The report must contain, at a minimum, the inspection results, a description of any discrepancies found, the airplane serial number, and the number of flight cycles and flight hours on the airplane.

(1) If the inspection was done on or after the effective date of this AD: Submit the report within 30 days after the inspection.

(2) If the inspection was done before the effective date of this AD: Submit the report within 30 days after the effective date of this AD.

(l) New Inspection for External Decals

Within 24 months after the effective date of this AD; or at the applicable time specified for inspection of external doubler, lap joint, or large cargo door hinge locations in Tables 1 through 6 of paragraph 1.E., “Compliance,” of Boeing Service Bulletin 777-53A0054, Revision 1, dated November 4, 2010; whichever is later: Inspect to determine the locations where external decals have been applied or removed across affected lap joints, large cargo door hinges, and external doublers, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 777-53A0054, Revision 1, dated November 4, 2010, except as specified in paragraph (n)(3) of this AD. A review of airplane maintenance records is acceptable in lieu of this inspection if a record of all decal activities (installation or removal locations) can be conclusively determined from that review.

(m) New Inspection for Scribe Lines and Related Investigative and Corrective Actions

If, during the inspection required by paragraph (l) of this AD, any location is found where external decals have been applied or removed across lap joints, large cargo door hinges, or external doublers: Before further flight, do a detailed exploratory inspection for scribe lines at all affected locations, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 777-53A0054, Revision 1, dated November 4, 2010, except as specified in paragraph (n)(3) of this AD. Do all applicable related investigative and corrective actions at the times specified in Boeing Service Bulletin 777-53A0054, Revision 1, dated November 4, 2010, by accomplishing all actions specified in the Accomplishment Instructions of Boeing Service Bulletin 777-53A0054, Revision 1, dated November 4, 2010, except as provided by paragraphs (i) and (n)(3) of this AD.

(n) Exceptions to Service Information

(1) Where Boeing Service Bulletin 777-53A0054, Revision 1, dated November 4, 2010, specifies a compliance time after the date on that service bulletin, paragraphs (l) and (m) of this AD require compliance within the specified compliance time after the effective date of this AD.

(2) Where paragraph 1.E., “Compliance,” of Boeing Service Bulletin 777-53A0054, Revision 1, dated November 4, 2010, specifies to “contact Boeing for inspection requirements for operation beyond 60,000 total flight-cycles after first repaint,” for those airplanes, this AD requires contacting the Manager, Seattle ACO, for all inspection requirements of this AD and for doing the requirements.

(3) Where Boeing Service Bulletin 777-53A0054, Revision 1, dated November 4, 2010, specifies to “Put the airplane back to a serviceable condition,” this AD does not require that action.

(o) Credit for Previous Actions

This paragraph provides credit for the actions required by paragraph (m) of this AD, if those actions were performed before the effective date of this AD using Boeing Alert Service Bulletin 777-53A0054, dated August 7, 2008.

(p) Paperwork Reduction Act Burden Statement

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 5 minutes per response, including the time for reviewing instructions, completing and reviewing the collection of information. All responses to this collection of information are mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be

directed to the FAA at: 800 Independence Ave. SW, Washington, DC 20591, Attn: Information Collection Clearance Officer, AES-200.

(q) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Seattle ACO, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in the Related Information section of this AD. Information may be e-mailed to:

9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(3) An AMOC that provides an acceptable level of safety may be used for any repair required by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Seattle ACO, to make those findings. For a repair method to be approved, the repair must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

(4) AMOCs approved for AD 2009-24-08, Amendment 39-16096 (74 FR 62217, November 27, 2009), are approved as AMOCs for the corresponding provisions of this AD, except that AMOCs approved for AD 2009-24-08 are not approved for fuselage areas where any decals may have been installed or removed on airplanes that have never been stripped or repainted since they left the factory.

(r) Related Information

For more information about this AD, contact Melanie Violette, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office (ACO), 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6422; fax: 425-917-6590; email: MelanieViolette@faa.gov.

(s) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(3) The following service information was approved for IBR on [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(i) Boeing Service Bulletin 777-53A0054, Revision 1, dated November 4, 2010.

(ii) Reserved.

(4) The following service information was approved for IBR on January 4, 2010 (74 FR 62217, November 27, 2009).

(i) Boeing Alert Service Bulletin 777-53A0054, dated August 7, 2008.

(ii) Reserved.

(5) For Boeing service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; phone: 206-544-5000, extension 1; fax: 206-766-5680; Internet: <https://www.myboeingfleet.com>.

(6) You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

(7) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:

<http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Renton, Washington, on March 29, 2013.

Ali Bahrami,
Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

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